Claims

1. An anti-fungal pharmaceutical composition comprising a therapeutically effective amount of a product prepared from rhizomes of *Zingiber officinale*, as an active ingredient, in admixture with a pharmaceutically acceptable carrier or diluent for the active ingredient, wherein said product is prepared by the following steps:

a) preparing a crude liquid from rhizomes of *Zingiber officinale*;

b) introducing the crude liquid to a reverse phase chromatography column, and eluting the column with water, a first eluent and a second eluent in sequence, said second eluent having a polarity weaker than that of the first eluent but stronger than that of chloroform, so that a first eluate resulting from elution of the first eluent and a second eluate resulting from elution of the second eluent are obtained;

c) removing the first eluent from the first eluate by evaporation, so that a first concentrated eluate is obtained and is able to be used as the product; and

d) removing the second eluent from the second eluate by evaporation, so that a second concentrated eluate is obtained and is able to used as the product;

wherein step a) comprises steps i) to iv), or comprises step I), step I'), or step I"), wherein said steps i) to iv) are:

i) shedding fresh rhizomes of *Zingiber officinale* and filtering the resulting mixture to obtain a filtrate and a residue;

ii) extracting the filtrate with a first organic solvent, recovering the resulting extraction solution of the first organic solvent, and evaporating the first organic solvent from the extraction solution to obtain a first concentrated extraction solution;

iii) extracting the residue with a second organic solvent, recovering the resulting extraction solution of the second organic solvent, and evaporating the second organic solvent from the extraction solution to obtain a second concentrated extraction solution; and

iv) combining the first concentrated extraction solution and the second concentrated extraction solution to obtain the crude liquid;

said step I) is:

I) extracting powder of dried rhizomes of *Zingiber officinale* with the second organic solvent, recovering the resulting extraction solution of the second organic solvent, and evaporating the second organic solvent from the extraction solution to obtain the crude liquid;

said step I') is:

I') steam distilling powder of dried rhizomes of *Zingiber officinale*, and concentrating the resulting distillate by evaporation to obtain the crude liquid; and

said step I") is:

I") extracting powder of dried rhizomes of *Zingiber officinale* with supercritical CO_2, recovering the resulting extraction solution of the supercritical CO_2, and evaporating CO_2 from the extraction solution to obtain the crude liquid.

2. The pharmaceutical composition according to claim 1, wherein the product as the active ingredient comprises 0 - 10 mg 6-shogaol per gram of the product, 1 - 150 mg 6-gingerol per gram of the product, and 0 - 40 mg 6-dehydrogingerdione per gram of the product.

3. The pharmaceutical composition according to claim 1, wherein said first eluent is methanol, and said second eluent is acetone

4. The pharmaceutical composition according to claim 3, wherein step a) comprises steps i) to iv).

5. The pharmaceutical composition according to claim 4, wherein said first organic solvent is ethyl ether.

6. The pharmaceutical composition according to claim 4, wherein said second organic solvent is acetone, methanol, ethanol or a combination of them.

7. The pharmaceutical composition according to claim 6, wherein said second organic solvent is acetone.

8. The pharmaceutical composition according to claim 3, wherein step a) comprises step I).

9. The pharmaceutical composition according to claim 8, wherein said second organic solvent is acetone, methanol, ethanol or a combination of them.

10. The pharmaceutical composition according to claim 9, wherein said second organic solvent is acetone.

11. The pharmaceutical composition according to claim 3, wherein step a) comprises step I').

12. The pharmaceutical composition according to claim 3, wherein step a) comprises step I").

13. The pharmaceutical composition according to claim 1, wherein said reverse phase chromatography column is packed with a porous resin.

14. An anti-fungal pharmaceutical composition comprising a therapeutically effective amount of the crude liquid prepared according to step a) in claim 1, as an active ingredient, in admixture with a pharmaceutically acceptable carrier or diluent for the active ingredient.

15. The pharmaceutical composition according to claim 14, wherein step a) comprises steps i) to iv).

16. The pharmaceutical composition according to claim 15, wherein said first organic solvent is ethyl ether.

17. The pharmaceutical composition according to claim 16, wherein said second organic solvent is acetone, methanol, ethanol or a combination of them.

18. The pharmaceutical composition according to claim 17, wherein said second organic solvent is acetone.

19. The pharmaceutical composition according to claim 14, wherein step a) comprises step I).

20. The pharmaceutical composition according to claim 19, wherein said second organic solvent is acetone, methanol, ethanol or a combination of them.

21. The pharmaceutical composition according to claim 20, wherein said second organic solvent is acetone.

22. The pharmaceutical composition according to claim 14, wherein step a) comprises step I').

23. The pharmaceutical composition according to claim 14, wherein step a) comprises step I").

24. The pharmaceutical composition according to claim 1, which is used in the treatment of a disease associated with *Trichophyton mentagrophytes* or *Pityrosporum ovale*.

25. The pharmaceutical composition according to claim 24, in which said disease is selected from the group consisting of tinea pedis, tinea capitis, tinea cruris, tinea glabrosa, onychomycosis, pityriasis capitis, pityriasis vesicolor, pityrosporum folliculitis, seborrheic dermatitis and dandruff.

26. The pharmaceutical composition according to claim 24, which is in the form of a shampoo, a bath gel, soap, a body lotion, a body cream or a detergent.

27. The pharmaceutical composition according to claim 26, which is in the form of a shampoo for use in the treatment of dandruff.

28. The pharmaceutical composition according to claim 14, which is used in the treatment of a disease associated with *Trichophyton mentagrophytes* or *Pityrosporum ovale*.

29. The pharmaceutical composition according to claim 28, in which said disease is selected from the group consisting of tinea pedis, tinea capitis, tinea cruris, tinea glabrosa, onychomycosis, pityriasis capitis, pityriasis vesicolor, pityrosporum folliculitis, seborrheic dermatitis and dandruff.

30. The pharmaceutical composition according to claim 28, which is in the form of a shampoo, a bath gel, soap, a body lotion, a body cream or a detergent.

31. The pharmaceutical composition according to claim 30, which is in the form of a shampoo for use in the treatment of dandruff.